ARP MANAGER Version 1.0



INTRODUCTION

ArpManager is a utility that lets you work with Yamaha Motif ES 6/7/8, S90 ES and MO 6/8 arpeggio files.

ArpManager lets you open one or many User Arpeggio (.W7G) files, or any of the supported ALL files (.W7A, .S7A and .M7A) that contain arpeggio files, and rearrange them into a new .W7G file that can be loaded by these keyboards.

ArpManager's document windows are simple lists which display the 256 locations for User Arpeggios by name, with some additional pieces of information such as category, number of measures, number of tracks, the notes used and whether they are fixed or not, and the amount of memory (in bytes) used by an individual arpeggio.

Copying User Arpeggios between files or within the same file can be achieved either by simple *drag 'n' drop*, or by the traditional Copy/Cut/Paste menu, with the usual keyboard shortcuts.

A more advanced feature of *ArpManage*r is the ability to edit the User Arpeggios. Double-clicking on an arpeggio brings up a dialog box that shows the details of the arpeggio as an event list, similar to the one present in the Motif ES onboard sequencer. You can alter this event list (or even build your own from scratch) by adding, deleting and modifying events for any of the four tracks that the arpeggio engine provides. You can also filter the events in order to focus on one particular event type or track.

If you plan to use *ArpManager* for its editing features, it is best to get familiar with the native Motif ES arpeggio engine. Even though *ArpManager* lets you build your own arpeggios with almost any level of complexity, your hardware synth will have the final word when it comes to turning these commands into music. We recommend that you experiment, so you'll get more and more familiar with what can and what can't be done in the arpeggio domain.

Finally, backup your data. *ArpManager* works on native Yamaha files and fortunately these files are not very large so don't be shy about saving data – possibly more than once - before any critical operation.

MAIN CONCEPTS

On startup, *ArpManager* opens an empty document. The menu will provide you with the usual application operations.

The File >> Open menu will default to files with the .W7G extension. You can open any file by selecting "All Files" from the File Type list. *ArpManager* identifies the files from their content, and not from their extension. W7G, W7A, S7A and M7A "All" files are supported.

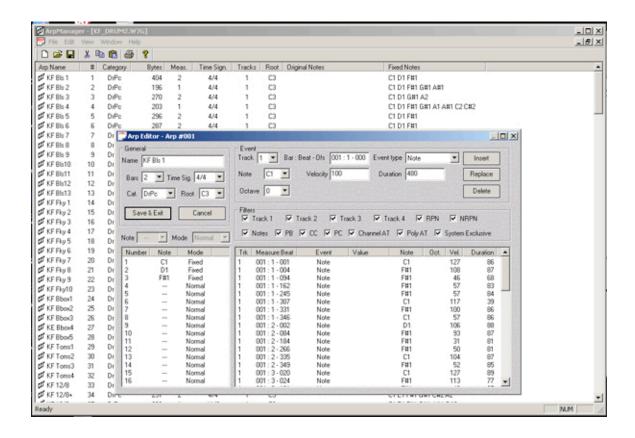
You can save only W7G files (User Arpeggios). Even if you opened an ALL file then you can still only (re)save the User Arpeggios portion of the ALL file. If you want to re-insert your new User Arpeggios back into an ALL file, load the User Arpeggio file back into your instrument and then save everything as an ALL. File directly from the keyboard.

On a computer, .W7G files appear with an accompanying W8G file. Although this secondary file is not seen within your Motif/S90 it is essential to copy both W7G and W8G files when handling files on a computer. *ArpManager* will create a default W8G file if one does not exist.

MAIN WINDOW

The arpeggio files are shown as a list of 256 possible locations. The locations are significant. If you move an arpeggio to a new location in the same file, then make sure you modify any Voice, Performance or Pattern Mix that employed your arpeggio in its old location, to its new location.

Locations are either empty (grayed icon), or filled with an arpeggio.



Arp Name. The arpeggio name (up to eight ASCII characters).

#. The location number (1 to 256).

Category. Any of the predefined arpeggio categories: Seq, ChSq, HySq, ApKb, Orgn, GtPl, GtKM, Bass, BaKM, Strn, Bras, RdPp, Lead, PdMe, CPrc, DrPc, Comb, Cntr;

Bytes. The amount of bytes used by the arpeggio. There is a limit of 71680 bytes for the total arpeggio memory. So, having 256 locations doesn't mean that you can use them all, especially if you have some "big" arpeggios. You can make a "big" arpeggio by creating a long, complex one, or by overusing the continuous controllers.

Meas. The bars length of the arpeggio, and therefore the point at which it will loop (1-16). Any event beyond the last measure set will not be played.

Time Signature. One of the 28 possible time signatures handled by the arpeggio engine.

Tracks. Number of tracks. The arpeggio engine is a four track sequencer, so you may have from one up to four tracks here.

Root. The base note from which all the notes in "Original Note" mode will be shifted from (see Motif ES Owner's Manual p.130).

Original Notes. The list of notes in Original mode.

Fixed Notes. The list of notes in Fixed mode (typically used for a drumkit where you do not want transpositions.

JOBS AND FUNCTIONS

Printing

The menu File >> Print will print out the list of the 256 arpeggio names in their respective locations.

Capacity

File >> Properties will compute the amount of bytes used, globally, for the whole file.

Copy/Cut/Paste

The usual Edit operation lets you copy, delete, and reorder the arpeggios between different locations. You can also just drag and drop the arpeggios individually between files, or within the same file.

If you Cut or Delete (Del. key) an arpeggio it will return to its empty state.

Entering Edit Mode

The menu Edit >> Edit Arp (or double-clicking on an arpeggio) will reveal the Arpeggio Edit window.

THE ARPEGGIO EDITOR

The arpeggio engine is a 4-track, 16 note sequencer. It is recommend that you spend some time in getting familiar with how this works directly on your Motif.

The "General" group will let you change the name, category, number of bars and root key of the whole arpeggio.

The "Notes" list, on the left, will let you choose which notes are to be used in the arpeggio, and especially in which mode, on a per-note basis. You have two ways to change the mode:

- 1. By selecting a note (a line in the list) and then choosing the mode in the drop-down list above;
- 2. By double-clicking on the mode name itself (this will cycle through the three available modes).

For the notes in "Normal" mode, you can't choose the note, since it will depend on the actual notes you'll be playing. For the other modes (Fixed and Original) you can choose the note in the same way that you choose the mode (except that double-clicking will take you to the notes drop-list).

Any change in the notes list will update the Events list. All "Note" events will be resolved to display the actual note.

The "Event" group lets you add a new event, replace or delete an existing one (use the related buttons). All events are related to a Track (1-4) and a location (or address). The location is expressed as "Bar: Beat - Ofs". This format is mandatory. The "Bar" shouldn't be greater than the number of bars of the "General" group. The "Beat" depends on the time signature.

Finally, since the arpeggio engine (like the internal sequencer) has a resolution of 480 PPQ (Pulses Per Quarter Notes) the "Offset" (Ofs) can take any value between 0 and 479, inclusive.

Finally, since the arpeggio engine (like the internal sequencer) has a resolution of 480 PPQ (Pulses Per Quarter Notes) the "Offset" (Ofs) can take any value between 0 and 479 inclusive in time signatures of type n/4 (like 4/4, 2/4, 3/4 etc.), 0 to 239 for n/8 time signatures (6/8, 9/8, 12/8 etc.) and 0 to 119 for n/16 time signatures (12/16, 16/16 etc.)

Types Of Events

As on the Motif ES itself, the arpeggio engine can store any event of the following types:

Note, Pitch Bend, Control Change, Program Change, Channel Aftertouch (Channel AT), Poly Aftertouch (Poly AT), RPN, NRPN and System Exclusive (Sysex).

Depending on the type of event selected, the data input fields will vary:

For Note: the Note (1-16), Velocity (0-127), Duration (in PPQ) and

Octave (-3 to +3).

For Pitch Bend: the Pitch Bend value (-8192 to +8191).

For Control Change: Controller ID and value.

For Program Change: MSB/LSB and number.

For Channel Aftertouch: the Channel Aftertouch value.

For Poly Aftertouch: the note and value.

For RPN and NRPN: MSB/LSB, Data 1 and Data 2.

For System Exclusive: a hexadecimal string where the bytes are separated by one space character. Initial F0 and final F7 are mandatory.

Filters

Below the "Event" group is the filter group, where you can select/unselect the types of events and the tracks to be displayed.

The Events List

The Events List displays the events according to the filter settings; in chronological order. For Note events, the displayed information includes the actual note (when possible), octave, velocity and duration. For other events, it depends on the parameters that are available.

To add an event, fill in the "Event" group above and click on "Insert," and the event will be inserted chronologically.

Note:

It isn't recommended to have two or more events at the same timestamp (measure/ beat/offset) for the same track. If the file format allows this, I have noticed that the actual keyboard (Motif ES in my case) automatically uses another track.

To modify an event, simply select the corresponding line, then edit whatever parameters you like in the "Event" group, and click on "Replace."

To delete an event, select it and either click on "Delete", or simply press the "Del" key.

Finally, you can either commit your changes by clicking on "Save & Exit", or cancel everything by clicking on the "Cancel" button.

Note:

If you wish to save your arpeggio, all of the notes that aren't in the "Normal" mode have to be resolved, i.e. you must define a real note for them.

DISCLAIMER / LIABILITY

We hope this program will be useful, interesting, and will also open doors for you in both in the technical and creative areas of your work.

Please keep in mind that Yamaha has not released any public, official specifications about these file formats; especially the arpeggio formats, so the information provided here is 'unofficial' and must be used entirely at your own risk.

ArpManager does not aim to replace any regular sequencing software. Its purpose is purely to fill a feature gap and provide you with a convenient way to archive, compile, and hopefully create your own User Arpeggio files.

If you have questions about the use of this product please post questions on the new dedicated <u>ARPEGGIOS / ARP MANAGER</u> forum on Motifator.com, or contact info@motifator.com.

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